

Please add new claims 31-73.

5-27
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31. (New) A remote maintenance system for industrial equipment installed at a remote location, said system comprising:

a database system which is connected to the Internet and stores maintenance information of the industrial equipment; and

a security system that allows a limited user of the industrial equipment to access the database through the Internet for handling a trouble associated with the industrial equipment.

32. (New) The system according to claim 31, wherein said database is updated based on the access of the user.

33. (New) The system according to claim 31, wherein said database stores information for identifying an industrial equipment trouble states that may occur in the identified industrial equipment, and corresponding countermeasures against the registered trouble states.

34. (New) The system according to claim 31, wherein said database system automatically notifies an appropriate personnel of the trouble with the industrial equipment.

35. (New) The system according to claim 34, wherein said database system automatically sends an e-mail to the appropriate personnel.

36. (New) The system according to claim 31, further comprises a LAN system connecting a plurality of computers and the database system, each of the plurality of computers being capable of accessing the database system through the LAN system.

37. (New) The system according to claim 31, wherein said security system comprises at least one of a codec system providing an encoded communication and a fire wall.

ab 38. (New) The system according to claim 37, wherein said codec system periodically changes codec algorithms.

39. (New) The method according to claim 31, wherein the industrial equipment comprises a semiconductor manufacturing apparatus and the maintenance information comprises trouble information of the semiconductor apparatus.

40. (New) A manufacturing system in a factory, comprising:
industrial equipment installed in the factory for manufacturing products;
a host computer; and
a LAN system connecting to the industrial equipment and the host computer, wherein the host computer is connected to the Internet to allow access to a remote computer placed at a remote location from the factory through the Internet, the remote computer providing at least one of database storing maintenance information of the industrial equipment

and a software library for the industrial equipment.

41. (New) A method according to claim 40, wherein the database stores information for identifying industrial equipment, trouble states that may occur in the identified industrial equipment, and corresponding countermeasures against the registered trouble states.

42. (New) A system according to claim 40, wherein the industrial equipment comprises different types of semiconductor apparatuses.

43. (New) A system according to claim 40, wherein the industrial equipment comprises the same types of semiconductor apparatuses.

44. (New) A manufacturing system, comprising:
a computer which is connected to the Internet and provides a database storing information of industrial equipment;
a first manufacturing factory having the industrial equipment and a LAN system capable of accessing the database through the Internet; and
a second manufacturing factory, located at a remote location from said first manufacturing factory, having the industrial equipment and a LAN system capable of accessing the database through the Internet.

45. (New) The system according to claim 44, wherein the database stores

information for identifying an industrial equipment, trouble states that may occur in the identified industrial equipment, and corresponding countermeasures against the registered trouble states.

46. (New) The system according to claim 44, wherein said computer automatically notifies an appropriate personnel of trouble with the industrial equipment.

47. (New) The system according to claim 46, wherein said computer automatically sends an e-mail to the appropriate personnel.

48. (New) The system according to claim 44, wherein the industrial equipment comprises a semiconductor manufacturing apparatus and the information comprises trouble information of the semiconductor apparatus.

49. (New) The system according to claim 44, wherein said first and second manufacturing factors belong to a single user.

50. (New) The system according to claim 44, wherein said first and second manufacturing factories belong to different users from each other.

51. (New) A method for shearing information of industrial equipment, comprising:
providing a database system which is connected to the Internet and

stores information of the industrial equipment;

allowing a first specified user of the industrial equipment with a first security system to access the database through the Internet; and

allowing a second specified user, different from the first specified user, of the industrial equipment with a second security system to access the database through the Internet, wherein the first and second security systems have different kinds of codec systems from each other.

ab

52. (New) The method according to claim 51, wherein the database stores information for identifying an industrial equipment, trouble states that may occur in the identified industrial equipment, and corresponding countermeasures against the registered trouble states.

53. (New) The method according to claim 51, further comprising a step of automatically notifying an appropriate personnel of trouble with the industrial equipment.

54. (New) The method according to claim 53, wherein said notifying step comprises automatically sending an e-mail to the appropriate personnel.

55. (New) The method according to claim 51, wherein each of the first and second security systems comprises at least one of a codec system providing an encoded communication and a fire wall.

56. (New) The method according to claim 51, wherein each of the codec systems periodically changes codec algorithms.

57. (New) The method according to claim 51, wherein the industrial equipment comprises a semiconductor manufacturing apparatus and the information comprises trouble information of the semiconductor apparatus.

58. (New) A method for sharing information of industrial equipment, comprising:

providing a first database system which is connected to the Internet and stores information of first industrial equipment;

providing a second database system which is connected to the Internet and stores information of second industrial equipment; and

allowing a limited user of the first and the second industrial equipment with security systems to access the first and second databases through the Internet.

59. (New) The method according to claim 58, wherein each of the databases stores information for identifying industrial equipment, trouble states that may occur in the identified industrial equipment, and corresponding countermeasures against the registered trouble sheets.

60. (New) The method according to claim 58, further comprising a step of

automatically notifying an appropriate personnel of trouble with the first or second industrial equipment.

61. (New) The method according to claim 60, wherein said notifying step comprises automatically sending an e-mail to the appropriate personnel.

62. (New) The method according to claim 58, wherein the security system includes at least one of a codec system providing an encoded communication and a fire wall.

63. (New) The method according to claim 62, wherein each of the codec systems periodically changes codec algorithms.

64. (New) The method according to claim 58, wherein each of the first and second industrial equipment includes a semiconductor manufacturing apparatus and the information includes trouble information of the semiconductor apparatus.

65. (New) The method according to claim 58, wherein the first and second databases are provided by different vendors from each other.

66. (New) A method for sharing information of industrial equipment, the method comprising the steps of:

providing a database system which is connected to the Internet and

stores information of industrial equipment;

connecting a plurality of departments, of a vendor who provides the equipment, with a computer network system such that each of the departments is able to access the database system, the plurality of departments including at least one of a maintenance department, a manufacturing department and a developing department; and

allowing a user of the industrial equipment with a security system to access the database through the Internet.

67. (New) The system according to claim 66, wherein each of the departments is able to fully access the database system and the user is able to access limited information of the database system.

68. (New) The method according to claim 66, wherein the database stores information for identifying an industrial equipment, trouble states that may occur in the identified industrial equipment, and corresponding countermeasures against the registered trouble states.

69. (New) The method according to claim 66, further comprising a step of automatically notifying an appropriate personnel of trouble with the industrial equipment.

70. (New) The method according to claim 69, wherein said notifying step includes automatically sending an e-mail to the appropriate personnel.